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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,470	01/09/2004	Kuo-Tsai Chiou	MR2561-143	6415
4586 7590 09/17/2007 ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			EXAMINER GRAHAM, PAUL J	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 09/17/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<p><b>Application No.</b></p> <p>10/753,470</p>	<p><b>Applicant(s)</b></p> <p>CHIOU, KUO-TSAI</p>	
	<p><b>Examiner</b></p> <p>Paul J. Graham</p>	<p><b>Art Unit</b></p> <p>2623</p>	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informality: In the abstract, the first sentence reads, "...invention is *in* related to ...". The word "*in*" should be removed from this sentence.
2. The claims are objected to because of the following informality: Claim 1 should have its limitations enumerated with a, b, c, like claim 9 is enumerated.  
Appropriate correction is required.

### *Drawings*

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because figures 1 and 2 do not show the relevant text captions in or near the elements that are enumerated with callouts. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:  
  
A person shall be entitled to a patent unless –  
  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1 - 4 and 6 - 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayes et al. (US 2002/0140571 A1).

As to claim 1, Hayes discloses a remote control device (e.g., "Mosaic") for a set-top box with a two-way transmission function, comprising (see [0009] for remote device, [0094] for 2-way TX, [0131] for STB coupling):

a set-top box having a transceiver device (comm. module), which includes a first receiving unit and a first transmitting unit (see [0177-0178] for STB with transceiver device (similar to that in fig. 14) with RX and TX units, note functions);

and a handheld device (Mosaic) including an input device (keypad / touch screen), a second receiving unit (IR receiver) corresponding to the first transmitting unit of the set-top box, a second transmitting unit (IR transmitter) corresponding to the first receiving unit of the set-top box and a display device (see Fig. 3 and [0047] and note correspondence in functions illustrated in [0177-0178]);

wherein the second transmitting device transmits a control signal generated by the input device to the first receiving unit of the set-top box (see [0050] for control signals and [0178] for request for response (control signal)),

the set-top box receiving the control signal and processing corresponding control functions (see Fig. 25, processor directs the closed captioning data, per request and see processor decision tree in Fig. 26), and generating a confirmation signal which is transferred to the first transmitting unit for transmitting to the handheld device (see [0177-0178] as noted the request for captioning data toggles that mode on / off in the STB, so when closed captioning data is again sent it is a confirmation signal of the response to said request),

the second receiving unit of the handheld device receiving the confirmation signal (see [0177] note the toggle discussion and [0178] transmission of signal),

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and the display device displaying the confirmation signal (see [0178-180] for display of confirmation signal (caption or other data)).

As to claim 2, Hayes discloses the remote control device of claim 1, wherein the receiving units and the transmitting units transmit signals through a transmission medium, which is selected from a group consisting of infrared transmission and radio frequency transmission (see Fig. 3 and [0047]).

As to claim 3, Hayes discloses the remote control device of claim 1, wherein the display device is selected from a group consisting of indication lights, multi-stage LED, liquid crystal display panels, and touch display devices (see Fig. 3 for LCD and touch panel for display and [0048-0049]).

As to claim 4, Hayes discloses the remote control device of claim 1, wherein the input device is selected from a group consisting of keyboards, touch panels and touch display devices (see Fig. 3 for keyboard (pad) and touch panel).

As to claim 6, Hayes discloses the remote control device of claim 1, wherein the second receiving unit and the second transmitting unit of the handheld device are separated and independent (see Fig. 3, 150, 160).

As to claim 7, Hayes discloses the remote control device of claim 1, wherein the first receiving unit and the first transmitting unit of the set-top box are coupled together (see [0161] for STB transceiver set up as in Fig. 14 and [0153] for gateway = STB).

As to claim 8, Hayes discloses the remote control device of claim 1, wherein the second receiving unit and the second transmitting unit of the handheld device are coupled together (see [0049] and Fig. 3, note IR controller coupling RX and TX).

As to claim 9, claim 9 is the method used in the 2-way communication between STB and remote control; therefore, claim 9 being similar to claim 1 is analyzed similarly (see above).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable by Hayes et al. (US 2002/0140571 A1) in view of Broadus et al (US 2003/0005462 A1).

As to claim 5, Hayes discloses the remote control device of claim 1, wherein there is a first receiving unit and the first transmitting unit of the set-top box.

However, Hayes does not explicitly teach that the units are separated and independent. Broadus et al., who discloses noise reduction in an interactive TV system does teach that the units are separate and independent (see [0051] and Fig. 2 and Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the display system of Hayes with the interactive TV system, which included separate transmission and reception units on the STB, of Broadus so that the system would have yielded predictable results and separating components would result in faster processing of data, enhancing the user experience (see Broadus, [0029-0031]).

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Klein et al. (US 2006/0259864 A1) discloses a remote control device with an improved interface that includes a display for the presentation of a response confirmation, such as "cable" when that mode of broadcasting is requested.

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***Inquiries***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul J. Graham whose telephone number is 571-270-1705. The examiner can normally be reached on Monday-Friday 8:00a-5:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

pjg  
9/12/2007



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